VGP-PRT1

SERVICE MANUAL

Ver. 5 2004K

Revision History

Area	Model	Lineup
Japanese	Japanese	VGP-PRT1
American	US Canadian	
European	AEP/UK	
Asian/Oceania/ South Africa	International	

[MA]
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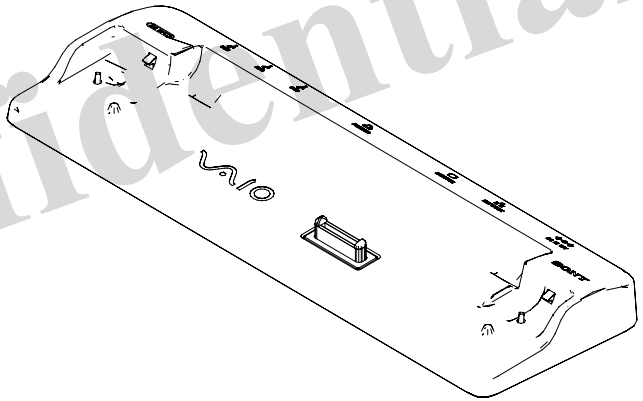

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· 本機の仕様および外観は、改良のため予告なく変更することがありますが、ご了承ください。

PORT REPLICATOR

SONY

9-876-395-05

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Caution Markings for Lithium/Ion Battery - The following or similar texts shall be provided on battery pack of equipment or in both the operating and the service instructions.

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

CAUTION: The battery pack used in this device may present a fire or chemical burn hazard if mistreated. Do not disassemble, heat above 100°C (212°F) or incinerate. Dispose of used battery promptly. Keep away from children.

CAUTION: Changing the back up battery.

- Overcharging, short circuiting, reverse charging, multilati on or incineration of the cells must be avoided to prevent one or more of the following occurrences; release of toxic materials, release of hydrogen and/or oxygen gas, rise in surface temperature.
- If a cell has leaked or vented, it should be replaced immediately while avoiding to touch it without any protection.

Service and Inspection Precautions

1. Obey precautionary markings and instructions

Labels and stamps on the cabinet, chassis, and components identify are as requiring special precautions. Be sure to observe these precautions, as well as all precautions listed in the operating manual and other associated documents.

2. Use designated parts only

The set's components possess important safety characteristics, such as noncombustibility and the ability to tolerate large voltages. Be sure that replacement parts possess the same safety characteristics as the originals. Also remember that the ⚠ mark, which appears in circuit diagrams and parts lists, denotes components that have particularly important safety functions; be extra sure to use only the designated components.

3. Always follow the original design when mounting parts and routing wires

The original layout includes various safety features, such as inclusion of insulating materials (tubes and tape) and the mounting of parts above the printer board. In addition, internal wiring has been routed and clamped so as to keep it away from hot or high-voltage parts. When mounting parts or routing wires, therefore, be sure to duplicate the original layout.

4. Inspect after completing service

After servicing, inspect to make sure that all screws, components, and wiring have been returned to their original condition. Also check the area around the repair location to ensure that repair work has caused no damage, and confirm safety.

5. When replacing chip components...

Never reuse components. Also remember that the negative side of tantalum capacitors is easily damaged by heat.

6. When handling flexible print boards...

- The temperature of the soldering-iron tip should be about 270°C.
- Do not apply the tip more than three times to the same pattern.
- Handle patterns with care; never apply force.

Caution: Remember that hard disk drives are easily damaged by vibration. Always handle with care.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANSCE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.

TABLE OF CONTENTS

Section	Title	Page

CHAPTER 1. SPECIFICATIONS

1-1. Specifications 1-1

(to 1-1)

CHAPTER 2. BLOCK DIAGRAM 2-1

(to 2-1)

CHAPTER 3. FRAME HARNESS DIAGRAM 3-1

(to 3-1)

CHAPTER 4. EXPLODED VIEWS AND PARTS LIST

Main Section

MS-1 4-2

Accessories

A-1 4-3

(to 4-3)

History of the changes is shown as the "Revision History" at the end of this data.

変更履歴は,“Revision History”として,本データ末に記載してあります。

CHAPTER 1.
SPECIFICATIONS

1-1. Specifications

Connectors Port replicator connector: Custom connector (1)
Network (LAN) connector: 100BASE-TX/10BASE-T (1)*
External display output:
Analog RGB, VGA, D-sub 15-pin (1)
Printer port: D-sub 25 pin (1)
USB: Type-A connector (3)*
* The specifications are the same as those of the notebook you are using. For details, refer to the manuals provided with your notebook.

Power requirements
AC adapter

Operating temperature
41°F to 95°F (5°C to 35°C)
(temperature gradient less than 18°F (10°C)/hour)

Operating humidity
20% to 80% (not condensed), provided that humidity is less than 65% at 95°F (35°C)
(hygrometer reading of less than 84°F (29°C))

Storage temperature
–4°F to 140°F (–20°C to 60°C)
(temperature gradient less than 18°F (10°C)/hour)

Storage humidity
10% to 90% (not condensed), provided that humidity is less than 20% at 140°F (60°C)
(hygrometer reading of less than 95°F (35°C))

Dimensions Approx. 11.3 (w) × 1.1 (h) × 3.9 (d) inches
(Approx. 287 × 26.4 × 97 mm)

Mass Approx. 47.7 oz. (1350 g)

Supplied accessories
Operating instructions (1)

接続端子
ポートリプリケーターコネクタ
専用コネクタ（1）
ネットワーク（LAN）コネクタ
（100BASE-TX／10BASE-T）（1）*1
外部ディスプレイ出力
アナログRGB、VGAタイプ、D-sub 15ピン（1）
プリンタポート
D-sub 25 ピン（1）
USB
Type-Aコネクタ（3）*1

ACアダプタ*2
電源
AC100～240V
（付属の電源コードはAC100V用です）
50／60 Hz
出力電圧、電流
DC16 V、最大4 A

動作温度 5℃～35℃（温度勾配10℃／時以下）

動作湿度 20%～80%（結露のないこと）
ただし35℃における湿度は65%以下
（湿球温度29℃以下）

保存温度 –20℃～60℃（温度勾配10℃／時以下）

保存湿度 10%～90%（結露のないこと）
ただし60℃における湿度は20%以下
（湿球温度35℃以下）

外形寸法 約287（幅）×26.4（高さ）×97（奥行き）mm

質量 約1350 g

付属品
ACアダプタ（1）
電源コード（1）
保証書（1）
取扱説明書（1）

*1 お使いのノートブックコンピュータの仕様と同等です。詳しくは、お使いのノートブックコンピュータに付属の取扱説明書または電子マニュアルをご覧ください。
*2 必ず本機に付属のACアダプタを使用してください。ノートブックコンピュータに付属のACアダプタは使用できません。

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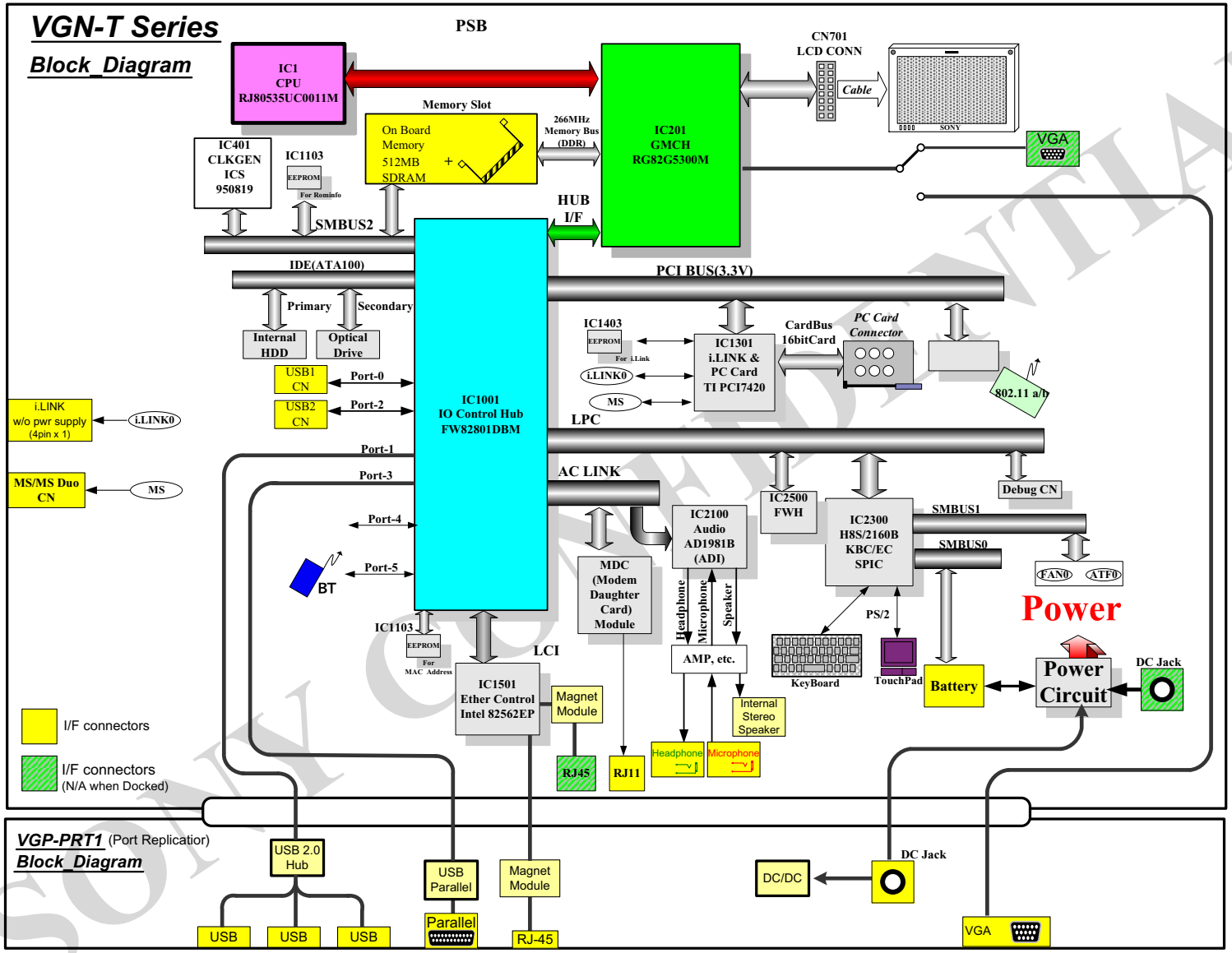
CHAPTER 2.
BLOCK DIAGRAM



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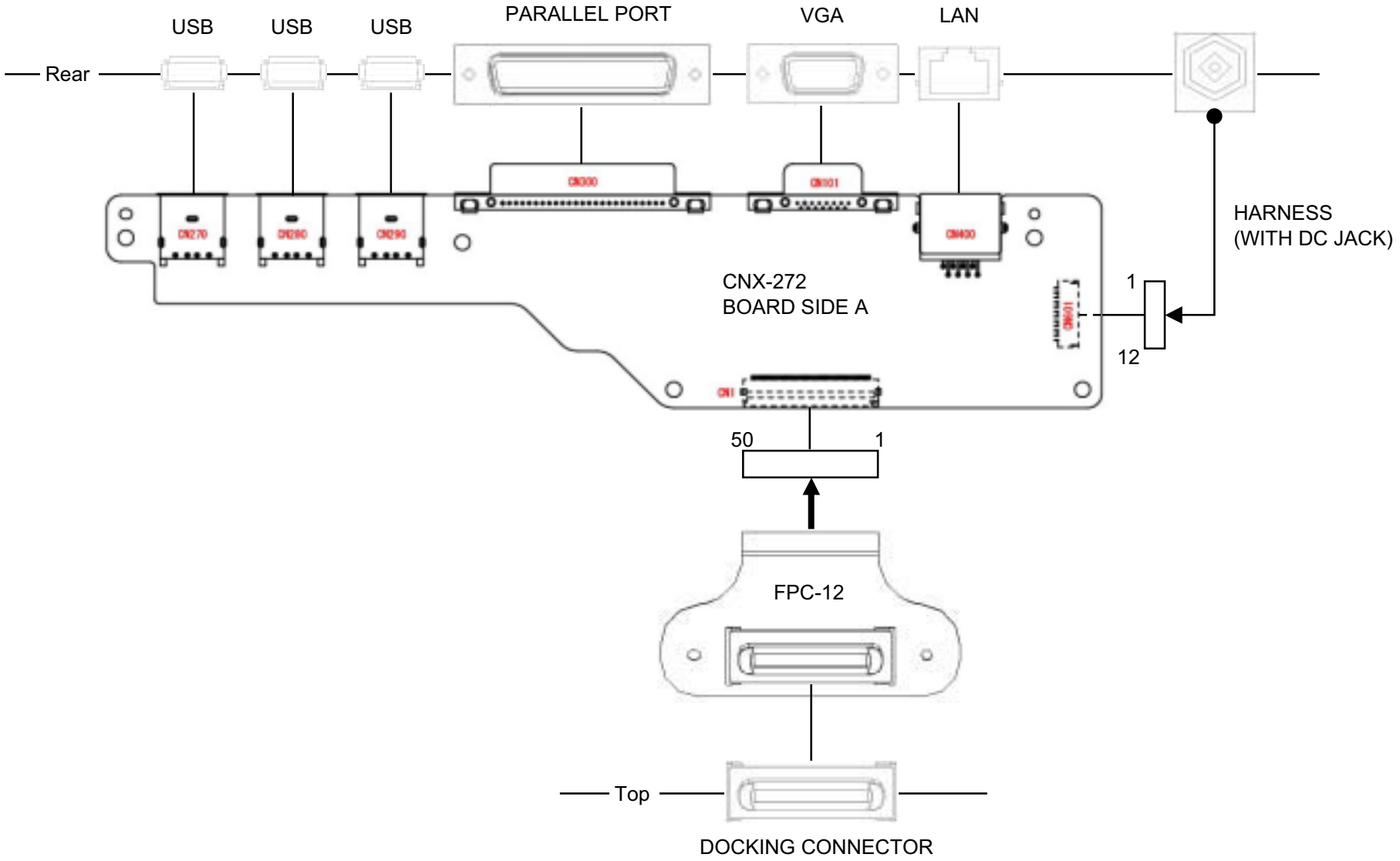
CHAPTER 3.
FRAME HARNESS DIAGRAM



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CHAPTER 4.
EXPLODED VIEWS AND PARTS LIST

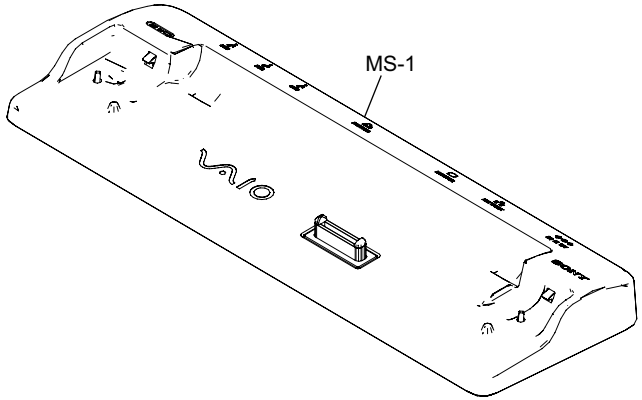
Section — Page

Main Section

MS-1 4-2

Accessory

A-1 4-3



NOTE:

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- When two or more parts are shown, use the part described first as the main part.
- The parts marked " $ " are the High Value Modules (HVM).
- The parts marked " # " are the parts on which barcode label is attached. For the barcode label, refer to CHAPTER 5.
- The parts marked "&" are the "Customer Replacable Parts (CRP)" that can be replaced by Field Customer Support. Especially the parts with the <&> mark require the special attention to use them. Here fore, check first whether the desired part is one of the targetted parts of the Customer Replaceable Parts (CRP), or the non-targetted parts by referring to the exploded view.

【使用上の注意】

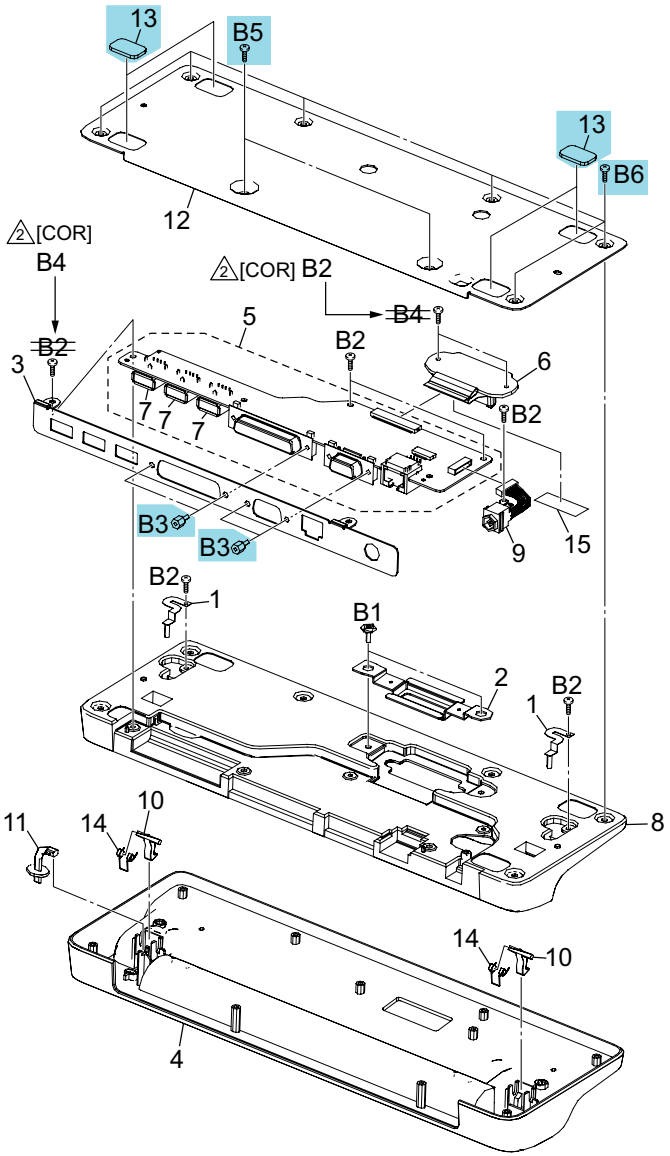
- *印の部品は常備在庫しておりません。
- 図面番号のない部品は供給しません。
- 併記部品の場合，上部記載部品をメイン部品として使用してください。
- 部品名称の前に$印のついた部品は，High Value Module（HVM）です。
- 商品名称の前に#印のついた部品は，バーコードラベル貼付部品です。
  バーコードラベルについてはCHAPTER 5を参照してください。
- 部品名称の前に&印のついた部品は，お客様窓口などでも交換可能なCustomer Replacable Part（CRP）です。
  特に<&>のついた部品は，使い分けが必要な部品ですので，分解図でCustomer Replacable Parts対象部品か，対象外部品かを必ず御確認ください。

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

⚠印の部品，または⚠印付きの点線で囲まれた部品は，安全性を維持するために重要な部品です。従って交換時は，必ず指定の部品を使用して下さい。

MS-1. Main Section



Ref. No.	Part No.		Description
1	X-4624-491-1		ASSY GND PIN L
2	2-148-818-01		BRACKET CONNECTOR
* 3	2-148-819-01		BRACKET IO
4	2-148-813-01		CABI TOP
5	A-1077-205-A		COMPLETE PWB CNX-272 (S)
6	A-1077-208-A		COMPLETE PWB FPC-12 (S)
7	1-794-548-21		CONNECTOR, USB(A)
8	2-148-817-02		FRAME PORTRE
9	1-963-243-11		HARNESS,CONNECTOR WITH
10	2-148-815-01		LATCH PORTRE
11	2-148-814-01		LENZ PORTRE
12	2-148-820-01		PLATE BOTTOM
13	2-148-821-01	&	SHEET FOOT S
14	2-148-816-01		SPRING PORTRE
15	2-547-465-01		DPR FPC12
B1	4-670-588-02		SCREW
B2	4-908-618-61		SCREW (+BTP) (2X4)
B3	4-635-966-01	&	SCREW (HEX)
B4	4-672-447-01		SCREW, TAPPING +B
B5	4-671-504-11	&	SCREW, TAPPING +P2.6
B6	2-055-460-01	&	SPECIAL SCREW (2.6X6, B)

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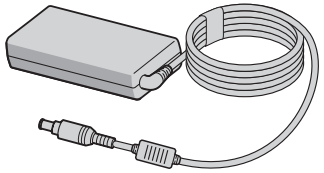
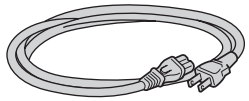
A-1. Accessories

101
AC Adaptor



102
Power Cord



	Ref. No.	Part No.		Description
	101	1-478-860-21		(J)...ADAPTOR,AC
	102	1-790-732-32		(J)...CORD, POWER
	-	2-190-293-01	&	(J)...MANUAL, INSTRUCTION
⚠ [MA] ⚠ [MA]	-	2-190-293-11	&	(AM, AO: International)...MANUAL, INSTRUCTION

List of VGP-PRT Series (As of November, 2004)

Service Manual Part No.	Model Name			
	J	AM	EU	AO
9-876-395-XX	VGP-PRT1	VGP-PRT1	VGP-PRT1	VGP-PRT1☜

☜ : Additional Models

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Revision History

Suffix	Ver.	Date	Contents	QM No.
-01	Ver. 1	2004.09.21	First Edition	
-02	Ver. 2	2004.10.04	△1 Front Page, Page 4-3, Back Cover	N2004_025AA
-03	Ver. 3	2004.10.05	△2 Page 4-2	N2004_027CA
-04	Ver. 4	2004.10.18	△3 Front Page, Back Cover	N2004_030AA
-05	Ver. 5	2004.11.01	△4 Front Page, Page 4-3, Back Cover	N2004_031AA

<Remarks>